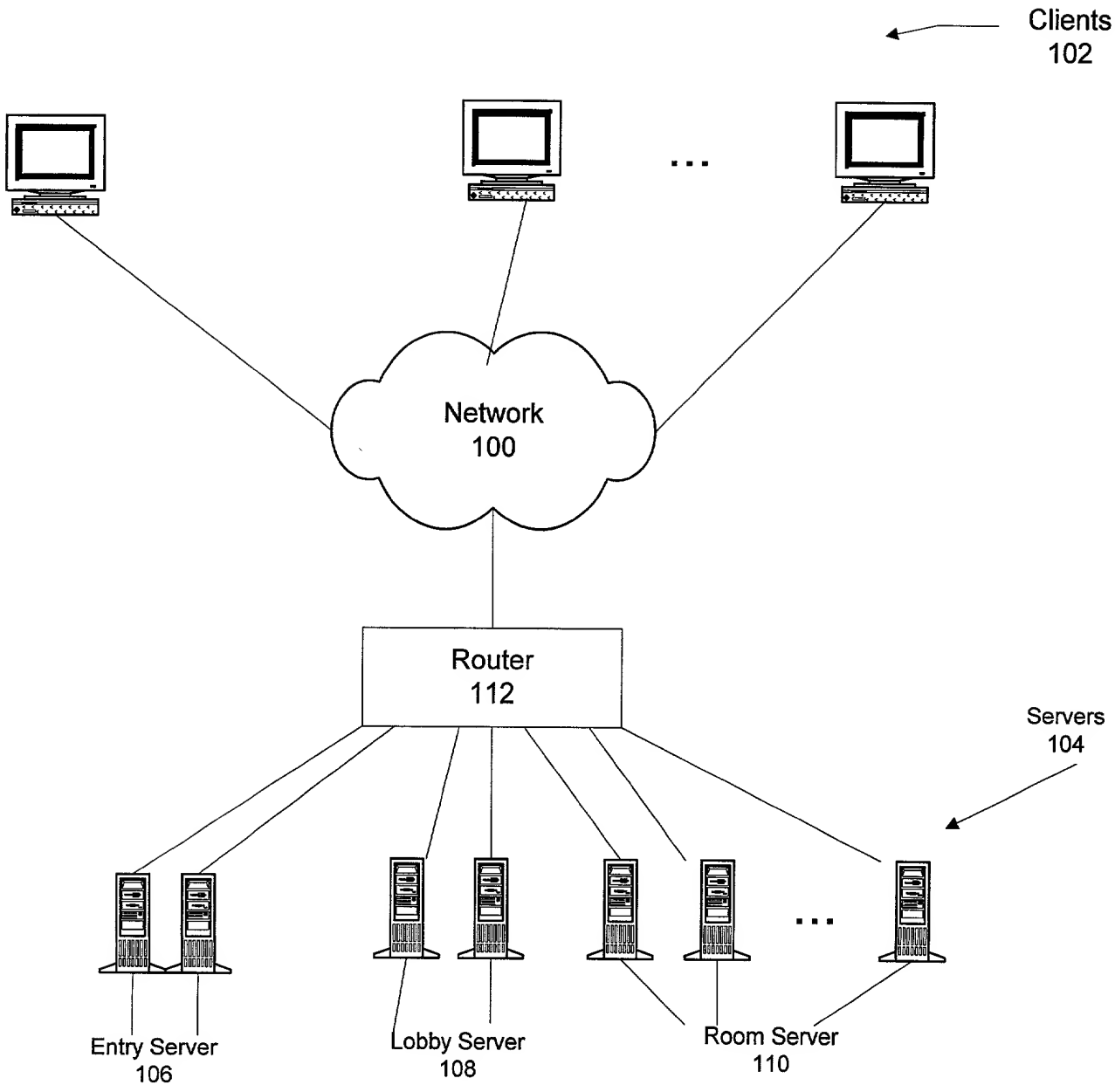
Clients
102
Network
100
Router
112
Servers
104
Entry Server
106
Lobby Server
108
Room Server
110

Figure 1

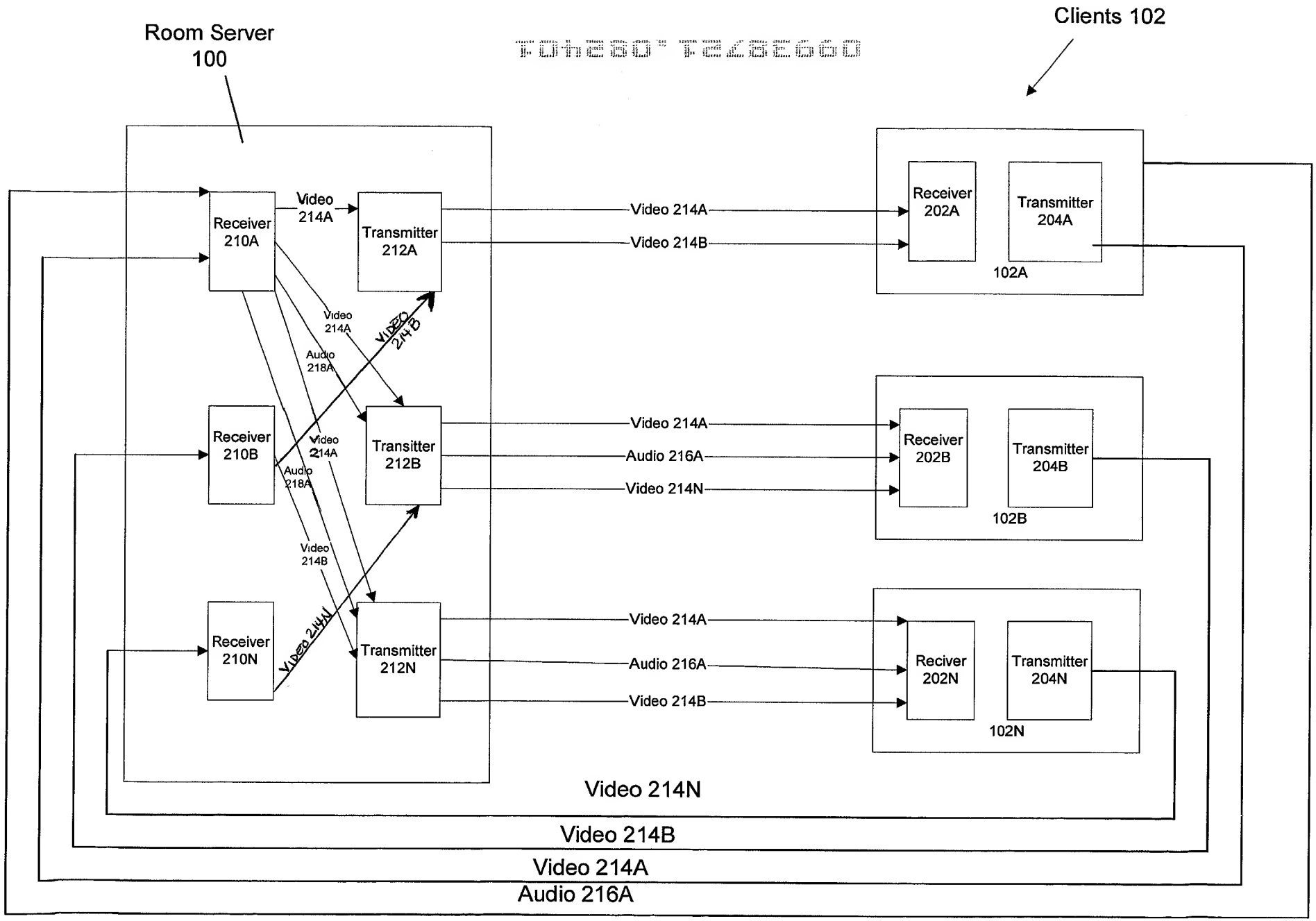
Room Server
100
Clients 102
Receiver
210A
Video
214A
Transmitter
212A
Video 214A
Video 214B
Receiver
202A
Transmitter
204A
102A
Video
214A
Video
214B
Audio
218A
Receiver
210B
Transitter
212B
Video 214A
Audio 216A
Video 214N
Receiver
202B
Transmitter
204B
102B
Video
214A
Audio
218A
Video
214B
Receiver
210N
Transmitter
212N
Video 214A
Audio 216A
Video 214B
Reciver
202N
Transmitter
204N
102N
Video 214N
Video 214B
Video 214A
Audio 216A

Figure 2

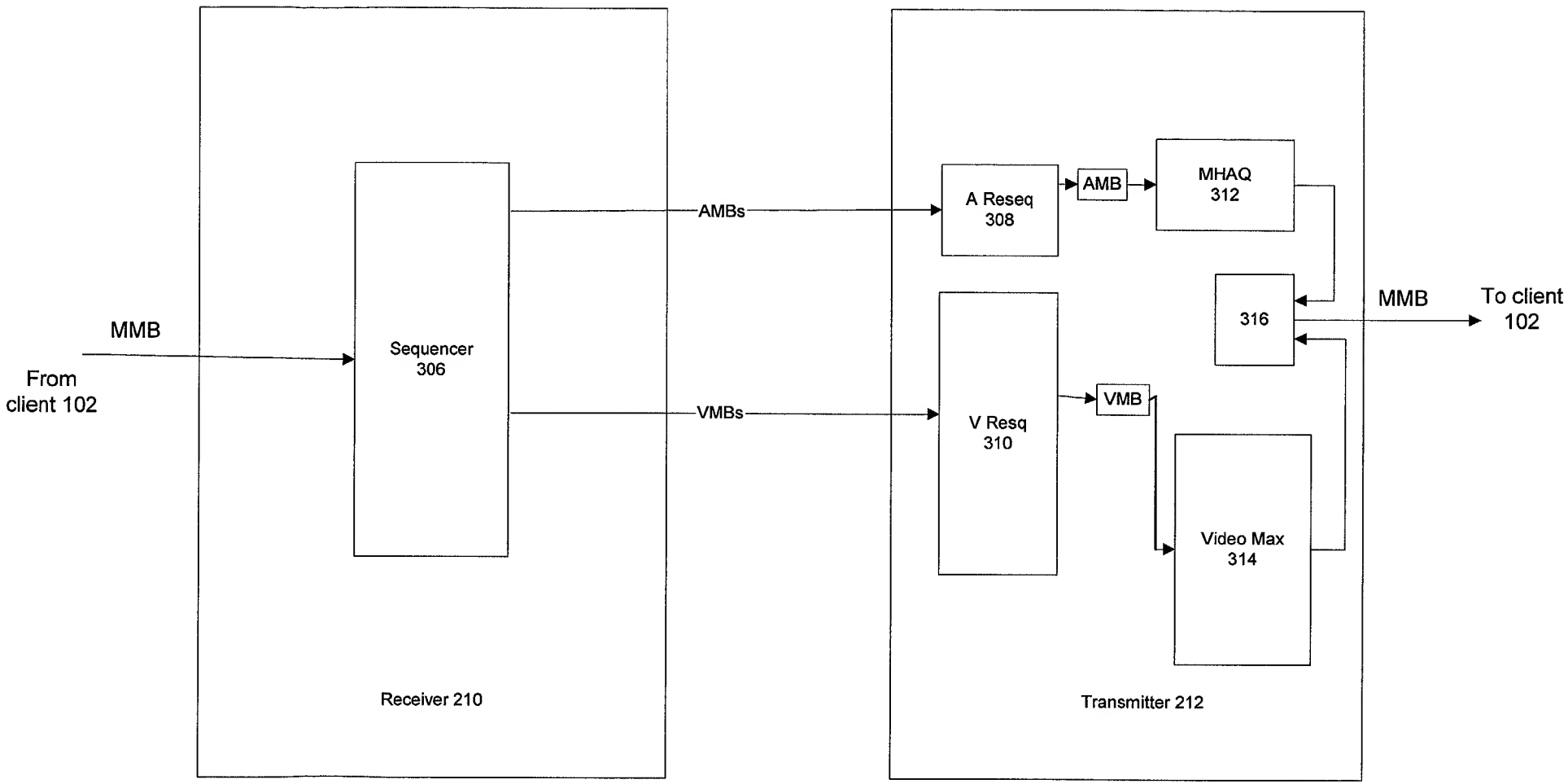
Room Server
110
MMB
From
client 102
Sequencer
306
AMBs
VMBs
Receiver 210
A Reseq
308
AMB
MHAQ
312
316
MMB
To client
102
V Resq
310
VMB
Video Max
314
Transmitter 212

Figure 3

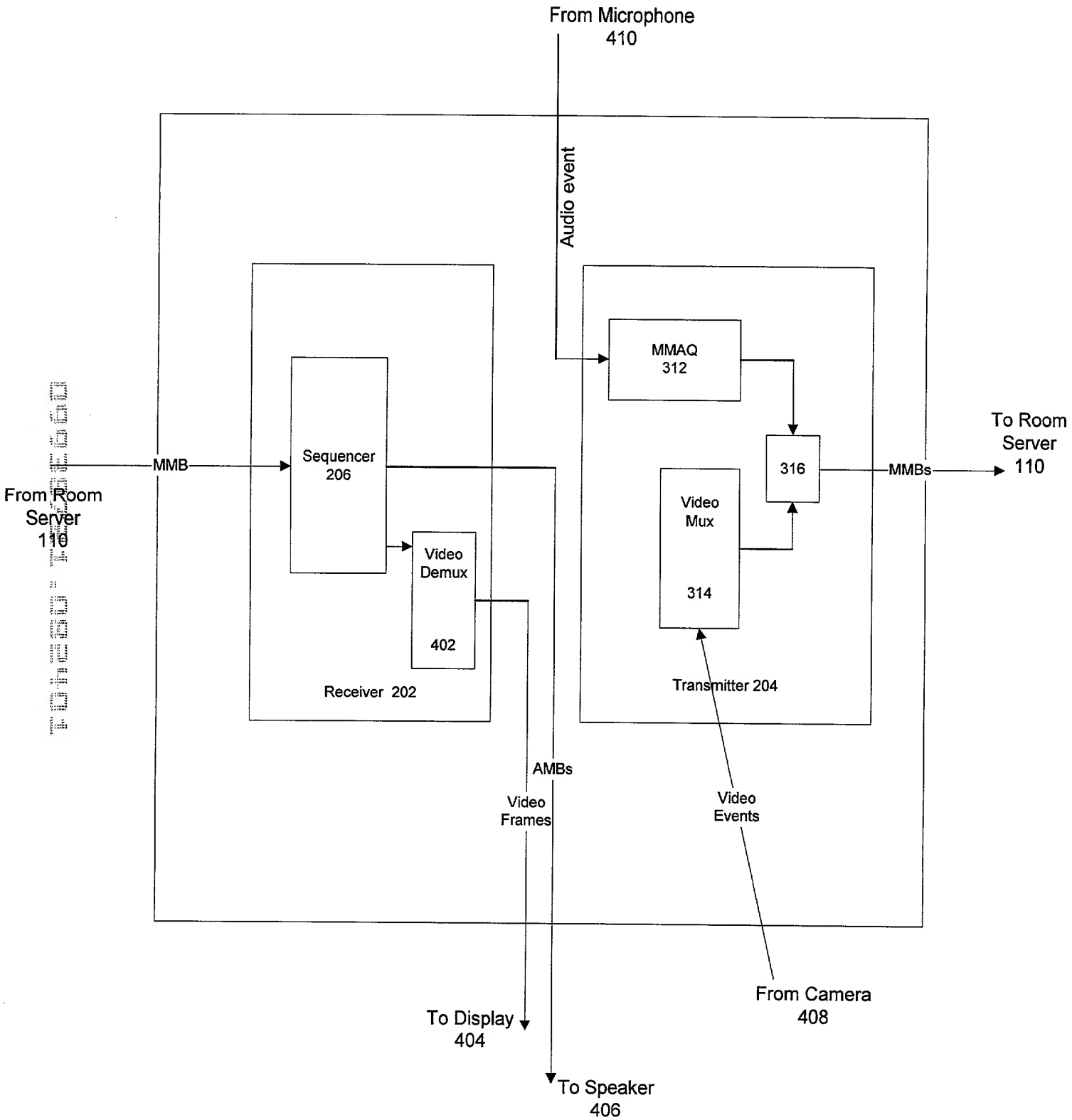
From Microphone
410
Audio event
MMAQ
312
316
To Room
Server
110
MMBs
MMB
From Room
Server
110
Sequencer
206
Video
Demux
402
Video
Mux
314
Receiver 202
Transmitter 204
AMBs
Video
Frames
Video
Events
From Camera
408
To Display
404
To Speaker
406

Figure 4

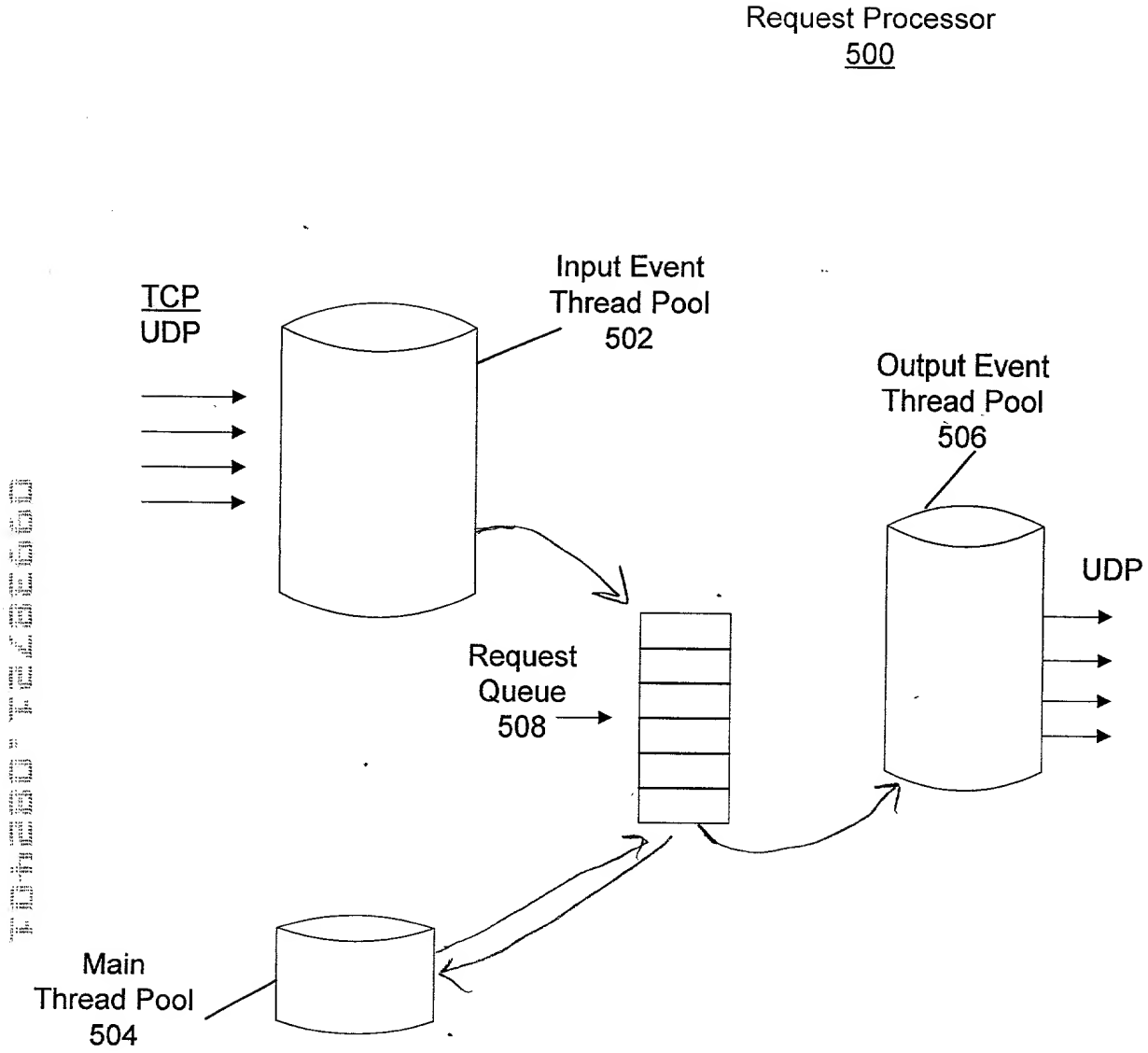
Request Processor
500
TCP
UDP
Input Event
Thread Pool
502
Output Event
Thread Pool
506
UDP
Request
Queue
508
Main
Thread Pool
504

Figure 5

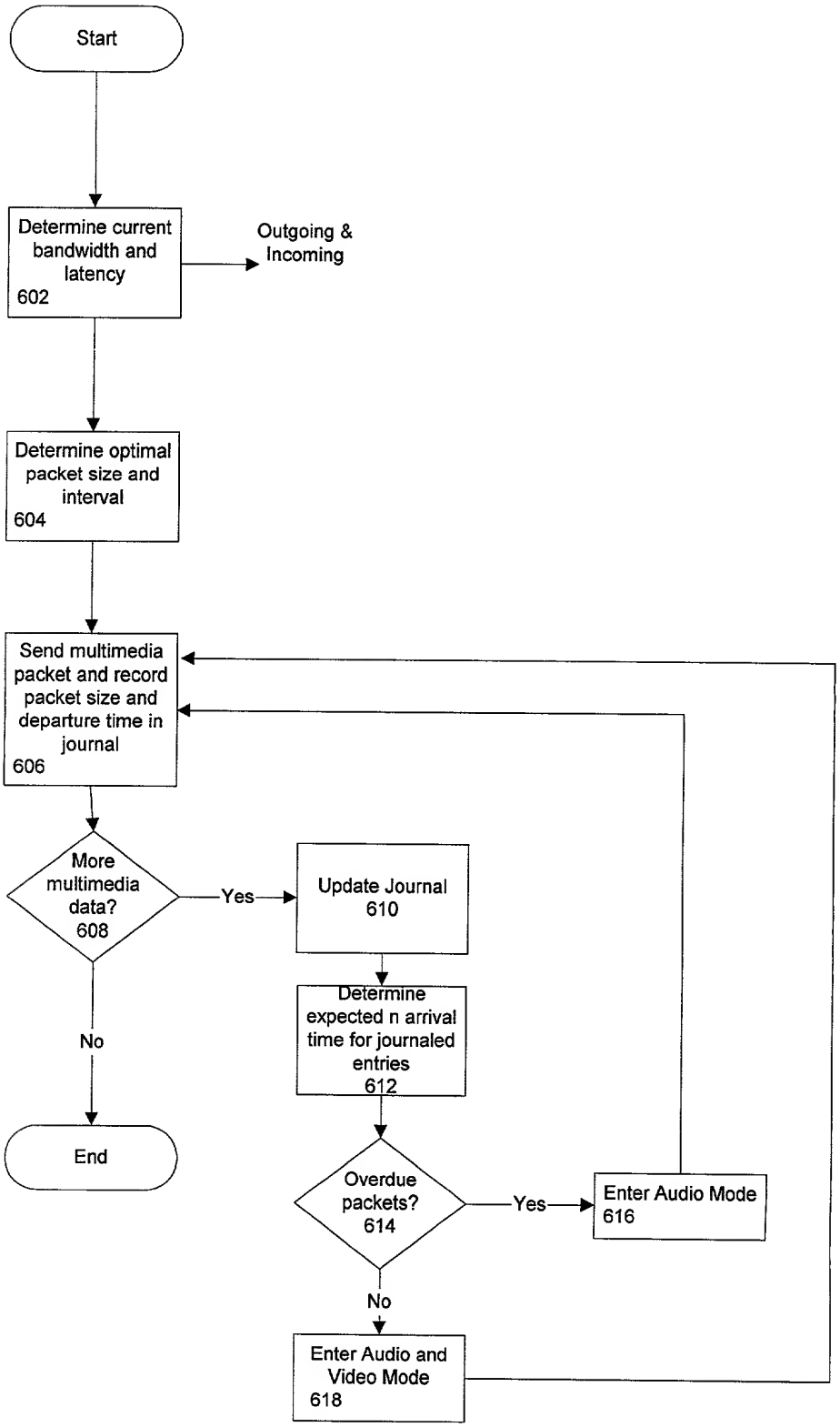
Start
Determine current bandwidth and latency
602
Outgoing & Incoming
Determine optimal packet size and interval
604
Send multimedia packet and record packet size and departure time in journal
606
More multimedia data?
608
Yes
Update Journal
610
No
End
Determine expected n arrival time for journaled entries
612
Overdue packets?
614
Yes
Enter Audio Mode
616
No
Enter Audio and Video Mode
618

Figure 6